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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,251	03/27/2001	Hisao Hiramatsu	Q63803	8044

7590 06/24/2003

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Washington, DC 20037

EXAMINER

SOOHOO, TONY GLEN

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,251

Applicant(s)

HIRAMATSU ET AL.

Examiner

Tony G Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al 5,555,767.

Makino et al teaches the a method of mixing in a which is a pipette sucks up a mixture of a 1st and 2nd liquid which has been previously disposed into an open container 24, and reintroduced into the open container whereby the liquid is directed towards a wall of the container, see for example, fig 4d, and is the cycle of suction and discharge is repeated to cause further agitation of the fluid, see column 10, lines 53-66 through column 11, lines 1-3, and 17-23; and claim 4 of the Makino et al patent; whereby the number of repeated cycles is five, column 12, lines 25-27 and 32-34.

Makino (et al) discloses all of the recited subject matter as recited in the claims with the exception of a step of and means which horizontally moves the pipette to a discharging position which is horizontally different from a sucking position the liquid.

It is noted that Makino, in figure 4D, teaches that the pipette does have a structural means to move the pipette when it is moved to a position "in an inclined orientation at the position facing the vessel 24" for discharge, column 10, lines 54-55. Also It is seen that the pipette 12 is movable horizontally as shown by figure 4E to a

Art Unit: 1723

center position, however, fails to point out where the suction occurs during the repeated suction and discharge, column 11, lines 1-3.

Since a person having ordinary skill in the art would have to lower the pipette from the position as seen in figure 4E to suck up the mixture 3 into the pipette, it is deemed that it would have been obvious to one of ordinary skill in the art to modify the means to position the 2nd pipette 12 to merely lower the pipette down the center of the container 24 for suction, since it would provide a less waste of motion to the distance to the surface of the mixture 3 for suction into the pipette 3 during the repeated suction and discharge cycle.

Additionally, as suggested by Makino during the discharge mixing step, column 10, lines 54-55, it is deemed that it would have been obvious to one of ordinary skill in the art to also further move the discharge position from the suction position of the 2nd pipette to "an inclined orientation at the position facing the vessel 24", whereby the cycle of suction and discharge of mixing, the nozzle moves the 2nd pipette from a center suction position to the inclined discharge position so as to cause mixing. (claims 1 and 8).

With regards to claims 2 and 7, in which the liquid is sucked with air, or the liquid blood, it is noted that the claims are directed to a method of mixing of materials, the particular work product of additional air (claim 2) or blood (claim 7) is directed to the material worked upon by the process and does not define the process itself, thus are denied patentable distinction to the manipulative steps in perfecting the mixing of liquids.

Art Unit: 1723

With regards to claims 3-5, note the suction/discharge cycle as shown by the example is five times, see column 12, lines 25-28, lines 33-35, lines 55-59.

With regards to claims 6 and 9, note in figure 4A-4E, the container 24 has 24M.

With regards to claim 10, note the pipette has a nozzle.

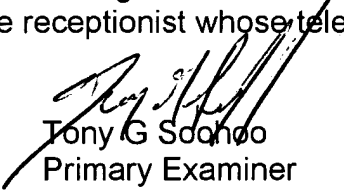
Response to Arguments

3. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kawanabe et al 5,452,619 shows the use of a nozzle for suction and dispensing of fluid.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G Soohoo whose telephone number is (703) 308-2882. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri.. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Tony G Soohoo
Primary Examiner
Art Unit 1723

tgS